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January 20, 2015

Mr. Mark Pattillo
Regulatory Branch
U.S. Army Corps of Engineers
5151 Flynn Parkway, Suite 306
Corpus Christi, TX 78411-4318

401 Coordinator
TCEQ, Mail Code 150
P.O. Box 13087
Austin, Texas 78711-3087

Re: Permit Application Number SWG-2014-00848
Cheniere Liquids Terminal, LLC

Dear Mr. Mark Pattillo and 401 Coordinator:

Texas Parks and Wildlife Department (TPWD) has reviewed the Public Notice for permit application number SWG-2014-00848, dated December 16, 2014. TPWD is the agency with the primary responsibility for protecting the state's fish and wildlife resources including their habitats (Texas Parks and Wildlife (TPW) Code §12.0011(a)). As such, TPWD is charged with providing recommendations that will protect fish and wildlife resources to local, state, and federal agencies that approve, permit, license, or construct developmental projects (TPW Code §12.0011(b)(2)). Additionally, TPWD is tasked with providing information on fish and wildlife resources to any local, state, and federal agencies or private organizations that make decisions affecting those resources (TPW Code §12.0011(b)(3)).

The applicant requests authorization to construct a crude condensate storage and marine loading terminal. Primary project features include a dual vessel berthing area capable of mooring and loading barges and ships, two docks, an onsite Dredged Material Placement Area (DMPA) located in uplands, and various landside support infrastructure, such as storage tanks, roads, parking areas and administrative buildings that would be constructed in uplands. The proposed vessel berth would be dredged to -45 feet Mean Low Tide (MLT) plus 2 feet advanced maintenance and 2 feet allowable overdepth. Approximately 2.6 million cubic yards of stiff clay would be dredged using both mechanical and hydraulic methods in association with the approximately 40-acre basin proposed for the berthing area. A rock revetment would be constructed along the side slopes of the proposed berth, with approximately 20,000 cubic yards of rock material placed across approximately 2 acres below the annual high tide line (AHT). The two proposed docks and associated marine structures would be 130 feet wide and 185 feet long. Construction (dredging and excavation) of the proposed berthing area would result in impacts to 2.87 acres of submerged aquatic vegetation (SAV) and 0.67 acre of estuarine wetlands located on the La Quinta Channel shoreline. In addition, 0.04 acre of SAV and 0.1 acre of estuarine wetlands in close proximity to the proposed top of slope may be impacted by equipment accessing the construction area or by long-term sloughing along the top of slope. The project is

located adjacent to the La Quinta Ship Channel, west southwest of Ingleside, in San Patricio County, Texas.

To compensate for 3.68 acres of impacts to seagrass, smooth cordgrass, black mangrove, saltwort, vegetated flats and high mars, the applicant has proposed to construct a mosaic of submerged, intertidal and supratidal habitat onsite. The proposed mitigation site will be constructed from uplands (some of which are significantly impacted) bordering the southern reach of Kinney Bayou and will total 13.2 acres of mitigation.

Please be aware that a written response to a Texas Parks and Wildlife Department recommendation or informational comment received by a state governmental agency on or after September 1, 2009 may be required by state law (Texas Parks & Wildlife Code Section 12.0011). Please transmit any written response to the address at the bottom of this letter.

The applicant states the primary criteria for selection of the mitigation site are ability to permit (site offers adequate compensation for the proposed 3.68 acres of impact), ability to construct, and likelihood of long- term success but provides no other mitigation site alternatives. The applicant states that a portion of the seagrass mitigation was completed as a condition of permit SWG 22302 but does not indicate whether further seagrass mitigation could be performed at this site. TPWD is concerned that the proposed site is not conducive to the success of the mitigation and that the applicant failed to identify additional habitats that will be impacted. According to the applicant the mitigation site will be constructed from impacted uplands but when viewing the mitigation site using the National Wetland Inventory maps, there will also be impacts to estuarine and palustrine wetlands due to their conversion from seagrass habitat creation. In addition, there is no mention of the filling of the diked palustrine habitat located on the project site.

> **Recommendation:** The applicant should describe all alternatives considered to mitigate for project impacts. The applicant should perform a habitat characterization survey to include all habitats both within the project and proposed mitigation sites. The mitigation plan should include compensation for impacts for both the project and mitigation sites.

The applicant failed to provide sufficient details in regards to the creation of the seagrass mitigation. First, neither the source nor the species of seagrass to be planted is specified. Second, it is unclear whether of the water quality, specifically the salinity and nutrient levels, are adequate for successful seagrass planting. The proposed seagrass mitigation site will be within Kinney Bayou at the confluence of the Ingleside wastewater treatment plant and the inflow of Corpus Christi Bay. The closest natural seagrass habitat is located over one-half mile away within Corpus Christi Bay. Third, the depth of the circulation channel is not given and due to the minimal tidal influence in this area; there may not be

enough exchange to maintain the newly planted seagrass beds. It is unclear whether adequate flow will be sufficient for success considering the distance from Corpus Christi Bay to the northernmost point of the circulation channel is over 0.7 mile. In addition, the applicant has proposed to create two separate seagrass mitigation areas connected only via the circulation canal. This plan not only fragments the seagrass beds but also causes fragmentation of the existing natural habitats within the mitigation site. Lastly, the applicant proposes to remove shrub/scrub habitat for the creation of seagrass mitigation. The mitigation site is adjacent to a large expanse of Texas Coastal Bend Live Oak-Redbay Forest complex that plays an important role for Neotropical birds during their migration and is a disappearing habitat due to development along the coast. Due to the proximity of the shrub/scrub habitat it may also serve as an overflow refuge during bird migration.

Recommendation: The applicant should:

- identify the species and source of seagrass for mitigation to assess the potential planting success at the proposed site.
- provide water quality information including salinity and nutrient levels as well as a circulation model to confirm adequate water exchange from Corpus Christi Bay.
- consolidate the mitigation to reduce habitat fragmentation of both the existing habitats as well as the ones created. The removal of the shrub/scrub community should be done in accordance with the Migratory Bird Treaty Act.

The Migratory Bird Treaty Act (MBTA) implicitly prohibits both intentional and unintentional take of migratory birds, including their nests and eggs, except as permitted by the USFWS. This protection applies to most native bird species, including ground nesting species. Although not documented in the Texas Natural Diversity Database (TXNDD), many bird species which are not listed as *threatened* or *endangered* are protected by the MBTA and are known to be year-round or seasonal residents or seasonal migrants through the proposed project area. Additional information regarding the MBTA is available from the USFWS-Southwest Regional Office (Region 2) at (505) 248-7882.

TPWD acknowledges the presence of black mangrove on the project site, while this species has slowly expanded its range to the north, we recommend that smooth cordgrass be substituted as a replacement species.

Recommendation: The applicant should plant smooth cordgrass in lieu of black mangrove and will be required to obtain a permit from TPWD for the introduction of plants into public waters of Texas.

The applicant states that the mitigation site will be placed in a conservation easement, deed restriction or similar instrument that limits the use of the

mitigation site. The easement, restriction or similar instrument should be held by an appropriate land manager with experience in overseeing the site.

> **Recommendation:** The applicant should use an established conservation entity (i.e., Land Trust Alliance, Nature Conservancy) to oversee the conservation instrument of the mitigation site. Any conservation entity or land manager overseeing this site should provide documentation of their previous experience in the administration of mitigation sites as well as financial assurances necessary for long term management.

The applicant should provide to the U.S. Army Corps of Engineers and the resource agencies revised project plans which address the above recommendations.

TPWD appreciates the opportunity to provide comments and recommendations for this project. Questions can be directed to Paul Silva (361-825-3204) or Leslie Koza (361-825-2329) in Corpus Christi.

Sincerely,

Rebecca Hensley

Rebecca Hensley
Regional Director, Ecosystem Resources Program
Coastal Fisheries Division

Texas Parks and Wildlife Department
Attn: Paul Silva
NRC Building, Ste. 2501
6300 Ocean Drive, Unit 5846
Corpus Christi, Texas 78412-5846

RH:LK:PS